Monthly Newsletter

Cape Fear Astronomical Society

Serving Wilmington, NC and Surrounding Areas

Cape Fear Astronomical Society is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

January 2023

President's Report

by Ben Steelman

First off, we owe a standing ovation to outgoing president Jon Stewart-Taylor.

Members of the Cape Fear Astronomical Society had daydreamed for four decades about having a deep-sky observatory site out in the country. (It even dates back to when we were just the Cape Fear Astronomy Club.) Jon made it happen -- with a lot of help -- on his watch. Very importantly, Kathleen has given us a free lease on land on their farm. Now, at Starfields, we have a site where we can mount our 'scopes, lock up some of our gear and meet with friends. It's a giant leap for stargazers.

Jon also oversaw a major rewrite of our club constitution and bylaws, after having played a major role in updating our incorporation as a non-profit. This was a lot of hard but useful donkey work.

We learned (or at least I learned) a lot about the night sky, thanks to Jon's monthly "On the Meridian" features. Plus, he led the push for useful new member packets.

Jon will still be a club officer, but I hope he gets a little well-earned rest.

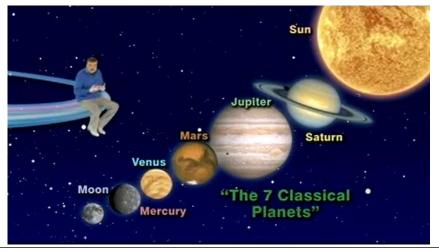
Meanwhile, we have a lot to look forward to in 2023. Venus and Mars will be just 20 minutes apart on Jan. 22, and a lunar occultation of Mars will be visible in our area on Jan. 31.

There's at least a remote chance that Comet C/2022 E3 (ZTF) might be visible to the naked eye in February, although its brightest magnitudes will be closest to the Sun.

And anybody up for a road trip: An annular solar eclipse will be visible over much of Utah, New Mexico and west Texas on Oct. 14.

As always, I urge you to think about putting together a program for our monthly meetings. And encourage friends to turn out.

In the words of the late, great Jack Horkheimer, keep looking up!



Calendar

January 2023

Date - Event - Time

03 Quadrantid Meteors: ZHR 110; Waxing gibbous Moon

06 Full Moon

08 ★ Cape Fear Astro Monthly Meeting ★

CFAS Monthly Meeting - 7:00pm – 9:00pm 212 DeLoach Hall; UNCW Also simulcast via Zoom

- 13 Club Observing @ Starfields (the Club Observatory); 5:00 PM; 3rd Quarter Moon
- 14 Club Observing @ Starfields (the Club Observatory); 5:00 PM; 3rd Quarter Moon
- 15 Last Quarter Moon
- 20 Club Observing @ Starfields (the Club Observatory); 5:00 PM; New Moon
- 21 Club Observing @ Starfields (the Club Observatory); 5:00 PM; New Moon
- 21 New Moon
- 28 First Quarter Moon
- 30 Mercury at Greatest Western Elongation; 25 degrees from the Sun. Look just before sunrise.

2023 Public Events

Watch this space for 2023 Public Events. If you haven't done one before, perhaps make a New Year resolution to try on – you might like it!

Special Interest Groups (SIGs)

<u>Usual</u> meeting dates – watch emails for exceptions

Phenomena: First Wednesday
Both Eyes: Second Tuesday
Telescope Usage: Third Tuesday
New Astronomer: Third Wednesday

Outreach: Fourth Tuesday



Two holes are visible in the rock. nicknamed "Rochette," from which NASA's **Perseverance** Rover obtained its first core samples. The rover drilled the hole on the left. called "Montagnac," Sept. 7, 2021, and the hole on the right, known as "Montdenier," Sept. 1. Below it is a round spot the rover

abraded.



A Bit About the AL's Observing Programs

by Karl Adlon

The link for Special Observing Awards is here:

https://www.astroleague.org/content/al-observing-challenge-special-observing-award

The Observing Program overview is here:

https://www.astroleague.org/observing.html

"Standard" Observing Program list is here:

https://www.astroleague.org/al/obsclubs/AlphabeticObservingClubs.html

And below is a small portion of the list of Astronomical League observing programs.







Advanced Observer Award

no pin AL Observing Challenge Certificates



Alternate Constellations Observing Program

Active Galactic Nuclei Observing Program



Analemma Observing Program



Arp Peculiar Galaxies Northern Observing Program



Arp Peculiar Galaxies Southern Observing Program

As I see it, there are 2 things here to consider.

If you want awards for aspects of observing you are interested in, this is the location!
 Even if you are not interested in the piece of paper, this is a good resource to help your observing, including how and what to document, even for your own future use to remember what you saw or did. -Karl

2023 CFAS Officers

President: Ben Steelman
Vice-Pres: Brendan O'Byrne
Associate VP: Jon Stewart-Taylor
Secretary: George Pappayliou
Treasurer: Bill Cooper
ALCor: Hank Lyon

Dues

Dues: Dues for 2023 are \$25 for Individual and \$32 for Family Membership. Students dues are \$5 per year. If you wish to mail dues: Mail to: CFAS, P.O. Box 7685, Wilmington, NC 28406

January Meeting Program

For the January Meeting, Jon will be doing a presentation called "Constellation Pathfinders". It will show how to use easy-to-identify star patterns to locate constellations.

The Sword of Orion



This image from NASA's **Spitzer Space Telescope** shows the Orion nebula, our closest massive starmaking factory, 1,450 light-years from Earth. The nebula is close enough to appear to the naked eye as a fuzzy star in the sword of the constellation. Credit: NASA/JPL-Caltech/Univ. of Toledo

A Long, Long Time Ago In a Town Far, Far Away

Akron, Ohio, the city I was born in, has the Astronomy Club of Akron. From them I stole the below list of events.

ACA_News_2022-12

January Astronomical Events					
Date	EST (h:m)	Event			
01	15:25	Moon at Ascending Node			
02	20:00	Mercury at Perihelion			
03	01:24	Pleiades 2.6°N of Moon			
03	19:35	Mars 0.5°N of Moon: Occn.			
04	03:00	Quadrantid Meteor Shower			
04	16:00	Earth at Perihelion: 0.98329 AU			
06	23:08	FULL MOON			
07	13:00	Mercury at Inferior Conj			
07	13:40	Pollux 1.9°N of Moon			
08	09:19	Moon at Apogee: 406459 km			
14	21:59	Spica 3.9°S of Moon			
15	02:10	LAST QUARTER MOON			
16	06:32	Moon at Descending Node			
18	09:32	Antares 2.1°S of Moon			
20	12:00	Jupiter at Perihelion: 4.95101 AU			
21	20:53	NEW MOON			
21	20:58	Moon at Perigee: 356570 km			
22	22:00	Venus 0.3°S of Saturn			
23	07:22	Saturn 3.8°N of Moon			
23	08:20	Venus 3.5°N of Moon			
26	02:00	Jupiter 1.8°N of Moon			
28	15:19	FIRST QUARTER MOON			
28	16:05	Moon at Ascending Node			
30	06:00	Mercury at Grtst Elong: 25.0°W			
30	07:21	Pleiades 2.4°N of Moon			
31	04:24	Mars 0.1°N of Moon: Occn.			

Sky events almanac courtesy of Fred Espanak, www.AstroPixels.com

Get to Know YOUR Astronomical League



The Astronomical League (Astroleague or AL) is one of the largest amateur astronomical organizations in the world. The organization serves to encourage an interest in astronomy (especially amateur astronomy) and promote the science of astronomy by:

75th =

- √ fostering astronomical education;
- ✓ providing incentives for astronomical observation and research;
- assisting communication among amateur astronomical societies.

CFAS is one of over 300 member societies affiliated with the Astroleague. Your membership in CFAS allows you take full advantage of this relationship so periodically review the information below to see how the Astroleague can support your astronomical interests and endeavors.

,				
AL Home Page	<u>www.astroleague.org</u>			
AL Observing Programs List	https://www.astroleague.org/al/obsclubs/			
	AlphabeticObservingClubs.html			
What's Up Doc?	http://humbleisd.net/Page/81224			
(Monthly Guide for AL Obs Pgms)				
Current Astroleague Bylaws	https://www.cotroloogue.org/ol/byloug/72, 2007 Pyloug.ond SP ndf			
(Please see News Bites below)	https://www.astroleague.org/al/bylaws/Z2_2007_Bylaws_and_SR.pdf			
Astroleague Store	https://store.astroleague.org/			
Astroleague Store				
Current and Past Issues of	https://www.astroleague.org/reflector/april-2022-reflector-magazine			
Reflector Magazine				
CFAS ALCor	Hank Lyon, <u>hlyon8448@gmail.com</u>			
AL News Bites and	Changes to AL Bylaws Up for Vote! Up for our club vote by March 31, 2023 are many changes to the AL Bylaws. These changes will be circulated in early January via Groups.io so please be on the lookout. In the interim, please review the current Bylaws via the link above.			
Reminders	If you've provided a mailing address to CFAS, please remember that your quarterly <i>Reflector</i> magazine will arrive via US Mail unless you specify the digital/email version.			

The Astroleague Correspondent (or ALCor) is your link between CFAS and the Astroleague. Don't hesitate to contact your ALCor if you need assistance with anything Astroleague related whether its general information or detailed coordination of observing program completions for certification. Check back here each month to see any new links, postings or reminders.

Copyright © 2023 Cape Fear Astronomical Society. All rights reserved. For permission requests, write to the Society, addressed "Attention: Permissions Coordinator," at the address below.

CFAS Correspondence:

Please contact the society at: CFAS, P.O. Box 7685, Wilmington, NC 28406

Members are welcome and encouraged to submit articles or other input for "CAPE FEAR SKIES". Submit any and all interesting items for publication to Karl Adlon, Editor (email kmja79@yahoo.com).

Cape Fear Astronomical Society is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

CFAS Officers:		Dues: Dues for 2023 are \$25 for Individual and \$32 for		
President:	Ben Steelman	Family Membership. Students dues are \$5 per year.		
Vice-Pres:	Brendan O'Byrne	Mail to :CFAS, P.O. Box 7685, Wilmington, NC 28406		
Associate VP	Jon Stewart-Taylor	Contact Us:		
Secretary:	George Pappayliou	You can contact CFAS at info@capefearastro.org		
Treasurer:	Bill Cooper	Our website is http://www.capefearastro.org/		
ALCor	Hank Lyon	Cal Tropolio lo Intp.//TTTT.capoloalaotio.org/		